Democracy in the Indonesian Digital Public Sphere: Social Network Analysis of Twitter Users' Responses to the Issue of Nationalism Knowledge Test at the Corruption Eradication Commission (TWK-KPK)

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Abstract

The mobility restriction during the COVID-19 pandemic did not stop the public from expressing their opinions. Since they could not go on demonstrations, they moved democracy to the digital sphere, such as on Twitter. Previous research has shown that Twitter users in Indonesia use the platform to express political views and opinions on governmental issues. The issue of the Nationalism Knowledge Test (TWK) at the Corruption Eradication Commission (KPK) was a trending topic on Twitter for a while. The issue spurred discussions on Twitter when 75 employees did not pass the KPK-TWK on May 2021. The discussion then stopped for a moment before picking up again during the official dismissal of the employees on 30 September 2021. This article focuses on the social network analysis of the public's responses to this issue on Twitter. Social network data were collected using Drone Emprit from May to October 2021 and analyzed using Gephi to generate graphical representations of the social networks. The results reveal the structure of the movement was centralized and dynamic. Regarding the dissemination of information, the most central was news media and anti-corruption activists' accounts. These accounts mobilized the community on Twitter to make a critical social movement. This means that the digital sphere can be an evolution of democracy form and activism, especially in the anti-corruption movement.

Keywords:
digital public sphere; digital democracy; corruption eradication commission; social network analysis

Introduction

In May 2021, the results of the *Tes Wawasan Kebangsaan* (TWK) or the Nationalism Knowledge Test at *Komisi Pemberantasan Korupsi* (KPK) or the Corruption Eradication Commission laid off dozens of employees. The public scrutinized this issue and expressed their views online, considering the evaluation controversial because of the irregularities in the assessment process, the discriminatory questions, and the lack of transparency (thejakartapost.com, 2021; tirto.id, 2021; tempo. co, 2021).

In a press release issued by KPK on its official website, kpk.go.id, the test was stated to be part of the transfer process of KPK employees to State Civil Servants (ASN) by the State Civil Service Agency, as mandated in Law no. 19/2019 concerning the Second Amendment to Law No. 30/2002 on the Corruption Eradication Commission and Government Regulation No. 41/2020 concerning the Transfer of KPK

Employees to ASN and KPK Regulation No. 1/2021 concerning Procedures for Transferring KPK Employees to ASN (KPK, 2021).

KPK further stated that 1,351 KPK employees took part in the Nationalism Knowledge Test starting from 18 March to 9 April 2021, with the following test results: (1) 1274 employees passed the test; (2) 75 employees did not pass the test; (3) two employees did not attend the interview (KPK, 2021). Of the 75 failed employees, 51 were let go, and 24 others were trained before their employment could be transferred to ASN status.

The Nationalism Knowledge Test at KPK differed from other agencies, as elaborated in a press release issued by the State Civil Service Agency regarding the test implementation to transfer KPK employees' status to ASN (BKN, 2021). The statement is as follows:

> "The Nationalism Knowledge Test (TWK) conducted for KPK employees was different from the TWK conducted for ASN because the ASN test was designed for entry-level. The questions given for ASN were to test the understanding of nationalism. Meanwhile, the questions for KPK employees were designed for senior positions (Deputies, Directors/Heads of Bureaus, Heads of Sections, Main Investigators, etc.)."(BKN, 2021)

The restrictions during the COVID-19 pandemic did not stop the public from expressing their opinions. Since they could not express themselves face-to-face, for example, through a demonstration, they took it online. This is because technological and communication innovations, especially social media, offer new ways for people to discuss, debate, and engage in the democratic process (Best & Meng, 2015; Jonh Ugwuanyi & Verlumun Celestine, 2019; Jost et al., 2018)

Twitter generates vast amounts of text that can offer insights into the public's opinions on any given topic and allow for a prediction of future trends (Ansari et al., 2020). In Indonesia, Twitter users use the platform to express opinions on political and government issues, as evidenced by the frequent trending topics that cover social, political, and government issues, including the TWK at KPK. A lot of Indonesian people express their opinions regarding this issue on Twitter.

With thread features and trending topics, Twitter is a microblogging-based social media suitable for gathering in cyberspace (Osatuyi, 2013). Therefore, Indonesian netizens use Twitter to voice their views and discuss current issues. Opinions are usually spontaneous and emotional and may contain positive or negative sentiments. Twitter has a significant impact because it can be an effective medium for digital campaigns and activism. The number of active Indonesian users on Twitter as of April 2021 was 15.1 million. This number places Indonesia with the sixth most active Twitter users globally (Statista, 2021). Tweets have a direct and mediated effect on the perception of public opinion. Through the interplay of the two networks, the representations of public opinion on the platform could be misleading (Gaisbauer et al., 2021). Oftentimes, negative comments outnumber positive comments (Lutz & Toit, 2014).

Twitter analysis has become a popular way to measure public perceptions and social network relationships. Given the rapid growth of Twitter users in the last five years, it has become a powerful tool for short-term communication to a large audience and testing sentiments on a specific topic (Sinnenberg et al., 2017). Social media data such as this allow for real-time and free monitoring of how people react to institutional or media communication (Paris et al., 2011; Stieglitz, 2012). Twitter is of particular interest because it exhibits both horizontal and vertical communication dynamics, as well as a personal dimension and collective visibility generated by aggregation practices, such as the use of hashtags (Bentivegna & Artieri, 2020).

Social media consists of online communication networks, defined as user relationships (Pozzi et al., 2017), that form a certain pattern and characteristics. Social network analysis is often used to describe such a pattern and structure emerging from the use of social media. In the digital public sphere, the comments of influential users are the same as leaders' opinion in the real world as they shape the information flow (Lazarsfeld, Berelson & Gaudet, 1948). Information from the mass media does not reach the intended audiences directly but through the mediation of influential users who process it and disseminate the output to the public. These users have certain characteristics that make them influential in the decision-making and behavior of the public. They often help others do their jobs better, facilitate personal development, and improve personal recognition by sharing their knowledge (Cheng, 2002).Thus, investigating the opinion leaders in the construction industry helps understand their functions, communication patterns, and influence on others, which may help those who are responsible for the construction industry to formulate safety regulations, and guide opinion leaders to better help the construction workers through social media(Yao et al., 2021).

The digital public sphere is a complex set of spaces with widely disparate practices. As a result, policymakers face difficulties in pursuing regulation aimed at mitigating evidence of inconsistently evident practices. Faced with this quandary, it can be turned to democratic theory, arguing that this rich body of scholarship can be used to inform a more proactive regulatory approach. There are two critical benchmarks for public debate based on Habermas' normative model of the coffeehouse: (1) diverse communities that bring people from all walks of life together, (2) publicly available knowledge that allows debate to proceed against a common set of accepted facts. In order to consider how these ideals could be promoted in practice, we revisited empirical debates about filter bubbles and echo chambers to reflect on how policymakers could proactively shape design and user behavior to advance preferred democratic ideals (Dommett & Verovšek, 2021).

The digital public sphere refers to the dissemination of information, critical publicity, and critical public debate via digital information and communication technologies. The digital public sphere does not include all information and communication via the Internet, mobile phones, and tablets. When commodification and capitalization (the logic of economic accumulation), dominance (the logic of political accumulation), and ideology (the logic of political accumulation) shape digital practices, they do not form a public sphere. The digital public sphere has been colonized and feudalized since then (Habermas 1989).

Analyzing trends on Twitter need to consider the roles of these influential users or opinion leaders, i.e., understanding their functions, communication patterns, and influence on others because this can provide an insight into the complex and widely disparate practices in the digital public sphere. Another consideration is the benchmarks for public debate based on Habermas' normative model (1) diverse communities that bring people from all walks of life, (2) publicly available knowledge that allows debate to proceed against a common set of accepted facts. That is to say, the digital public sphere refers to the dissemination of information, critical publicity, and critical public debate via digital technologies. It does not refer to all information and communication on the Internet, mobile phones, and tablets. Instead, it is formed without the logic of economic and political accumulation, namely commodification, capitalization, dominance, and ideology (Habermas 1989).

However, this ideal notion of the public sphere may not always be the case, considering the social media algorithm and how they

go about business. Filter bubbles and echo chambers are two concepts constantly revisited to achieve democratic ideals (Dommett & Verovšek, 2021). Nonetheless, beliefs and opinions expressed on Twitter may be amplified or reinforced by communication and repetition inside a closed system. The reason is that the public sphere is like a public debate or a town meeting. While some meetings have a free-flowing debate, others have almost no one showing up. Also, powerful leaders and organized coalitions dominate, and people with minority viewpoints are shouted down or left standing outside (Price, 1992).

The third consideration in the data analysis is that public spheres develop when political speech and association are protected, and individuals have strong capacities to collaborate for common goals. A genuine public space is deliberative so that statements may be cruel, manipulative, exclusionary, and deceitful (Bächtiger et al., 2018). However, debates on a digital public space may also allow for digital democracy to take place through (1) the exploration of information and solution, (2) knowledge sharing, and (3) the creation of an integrated solution approach. When data are examined, compared, and merged, collective decisions can be made (Helbing, 2021). Public spheres, indeed, are multiple, differentiated, and overlapping, embracing political actors, with social movements, old and new media, informal political discussions, or topics that the public should be discussed among friends, acquaintances (Fraser, 1990), or Internet users.

As described above, textual data involving debates in a public sphere can be analyzed using algorithms. Twitter analyses often involve algorithms that report emotions in unique values or classify messages into positive, negative, or neutral sentiments (Wang & Zhuang, 2017; Brynielsson et al., 2014). Sentiment analysis, also known as opinion mining, has been a popular area of research in natural language processing since the early 2000s (Liu, 2012; Pozzi et al., 2017). In sentiment analysis, an automated tool is built to extract subjective information from natural language texts, such as opinions and emotions, and create structured and practical use, such as decision support systems or decision makers (Pozzi et al., 2017). The challenge in sentiment analysis using Twitter data is pre-processing the raw textual data and cleaning the noise, such as slang words and abbreviations (Combei et al., 2020).

In terms of goal, sentiment analysis classifies sentences into subjective and objective categories. Subjectivity classification distinguishes sentences that express objective or factual information (objective) from sentences that express subjective views and opinions (subjective) (Pozzi et al., 2017). If a particular sentence is classified as objective, the task stops. If the sentence is classified as subjective, the task is to classify the sentiment into positive, negative, or neutral.

The democratic foundations of the concept of public opinion are undeniable; far less so are the democratic foundations of day-to-day political decisions, even when formed through public debate. We can compare public debate to a town meeting, but keep in mind that while some town meetings have a free-flowing debate, others have almost no one show up, influential leaders and organized coalitions dominate, and people with minority viewpoints are shouted down or left standing outside (Price, 1992).

Moving beyond political institutions, civil society and the public domain have loomed big in deliberative democratic philosophy, particularly in Jürgen Habermas-inspired strands. According to the meanings of the word "public," the public sphere might be defined as the whole of debate in the public life of a society, including government institutions. However, Habermas-following deliberative democratic theorists define the public sphere as public life outside of formal institutions of

government that creates public opinion to which the institutions should respond. Following Fraser's (1990) elaborations, we shall refer to public spheres as multiple, differentiated, and overlapping, embracing political actors, social movements, and old and new media. They may also include informal political discussions or discussions on topics that the public should be discussing among friends, acquaintances, and internet interlocutors. When political speech and association are protected and individuals have strong capacities to collaborate for common goals, public spheres develop. Of course, the deliberative aspects of genuine public spaces should not be romanticized; much of what happens in the spoken public is cruel, manipulative, exclusionary, and deceitful (Bächtiger et al., 2018).

Learning to mix the greatest ideas of individuals with each other is important to digital democracy. The objective is to find better solutions-solutions that work for people. This is done in multiple steps: (1) Exploration, information search and solution search; (2) Sharing, knowledge is shared with others; (3) Integration, creation of integrated solution approaches via debate. The data is examined, compared, and merged. This is the foundation of the swarm's collective decision (Helbing, 2021).

This study focuses on the issue of TWK-KPK because it was a trending topic on Twitter from May to October 2021 (six months). Our preliminary observation found that this issue began to be discussed on Twitter when 75 people were declared failing the TWK-KPK. The trend declined but picked up again at the time of the release of the TWK-KPK Documentary Film "End Game". We also found hashtags used by netizens in voicing opinions regarding this issue, such as *#Angkatan75*, *#75PegawaiKPK*, *#TWKWKWK*, *#TWKnottransparan*, *#SOSKPK*, *#KPKEndGame*, and *#beranijujurpecat*.

Previous research on using sentiment analysis examined the influence of fake accounts on the COVID-19 issues in Indonesia (Pratama & Tjahyanto, 2022). Another study focused on the #2019GantiPresiden campaign in various cities around Indonesia, explicitly demanding Joko Widodo renounce the position. The #2019GantiPresiden campaign gained momentum and prompted Jokowi's supporters to launch counter campaigns on social media, such as #2019TetapJokowi, #Jokowi2Periode, and #DiaSibukKerja. The supporters also staged counter-protests in cities around the country (Toha & Harish, 2020). The analysis of the pattern of social movement on Twitter was also carried out to observe the rejection of regional policy, which became a national issue (Zahra et al., 2020). Other studies focused on Twitter diplomacy regarding Saudi critiques of Nahdatul Ulama (NU) and Islam Nusantara (Formichi, 2021). Other studies using sentiment analysis on Twitter include the sentiments toward political figures (Pramono et al., 2017) and political leaders' communication during the COVID-19 pandemic (Kaur et al., 2021).

This study proposes the structure of the information network regarding public perceptions of the TWK-KPK on Twitter. In analyzing the network structure, we identified the main actors disseminating the information on the issue to determine the messages considered relevant to the community. First, this study aims to identify the words that most often appear related to the TWK-KPK. Then each opinion was categorized into neutral, positive, and negative sentiments. After that, we identified the influential Twitter accounts. The advantages of using Twitter data in our case are (1) analyzing users' discussions about the TWK-KPK, (2) capturing the personal views of the users, either of consensus or disagreement, (3) tracing the public debate with a large audience; (4) multiple observations in real-time.

Methods

The research was conducted using the Social Network Analysis (SNA) method, capturing the structure of social networks

with various interconnected elements in the social environment. In contrast to social and behavioral sciences, SNA is based on an assumption of the importance of relationships between actors or nodes (Felt, 2016; Golbeck, 2013; Himelboim, Smith, Rainie, Shneiderman, & Espina, 2017; Marin & Wellman, 2010; Monshipouri, Whooley, & Ibrahim, 2016)

SNA aims to determine the interpretation of the TWK-KPK opinions on Twitter and analyze the sentiment of netizen conversations. In identifying the communication structure contained in a system, the communication flow data are analyzed using the type of interaction as a unit of analysis. This study uses a positivist approach that rationalizes research as a tool to examine and study social events (Himelboim et al., 2017; Marin & Wellman, 2010)

This method can determine the structure of a network and the intensity of members in the network, including the actors' roles in a communication network. The focus of the analysis in this study is, first, the actors who tweeted or retweeted about the TWK-KPK issue on Twitter. After that, the relationship formed from the network was identified.

Research data were collected using Drone Emprit software. Information was web-crawled to identify all accounts that use hashtags *Tes Wawasan Kebangsaan* or *TWK* on Twitter. Data were mapped using the graph theory with the help of Gephi applications to find the pattern of network structure formed from the use of the hashtags *Tes Wawasan Kebangsaan* or *TWK* on Twitter. The results of the data analysis were then coded based on the network structure (components, clicks, bridges, hubs, cutpoints, and isolates). This study uses a realist approach with a population of users on Twitter with activities related to *Tes Wawasan Kebangsaan* or *TWK* issues.
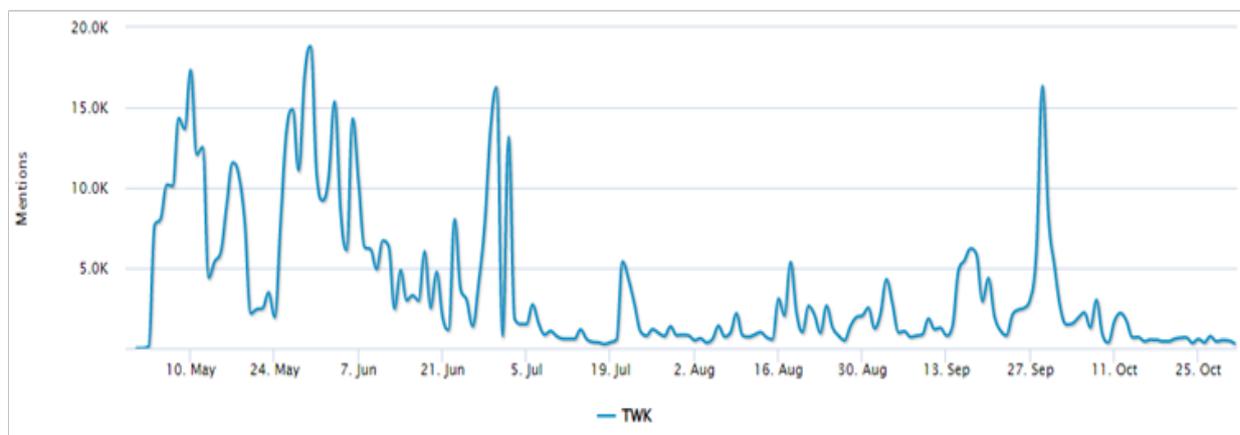
Results

The results showed that from 1 May 2021 to 31 October 2021, 691,250 tweets discussed TWK-KPK, including tweets, mentions, retweets, quote retweets, and replies. The number of tweets varies each month. The trends peaked in May 2021 (267,865 tweets) and June 2021 (195,626 tweets) before declining from July 2021 (51,410 tweets) to August 2021 (45,264 tweets). In September, the trend picked up and reached 95,713 tweets. In October 2021, the conversation declined to a total of 35,372 tweets (see the Figure 1).

The TWK-KPK issue became a trending topic on Twitter starting Monday, 3 May 2021. On that day, CNN Indonesia tweeted their report entitled "75 KPK's employees did not pass the ASN's Nationalism Knowledge Test," with 87 retweets and 244 likes.
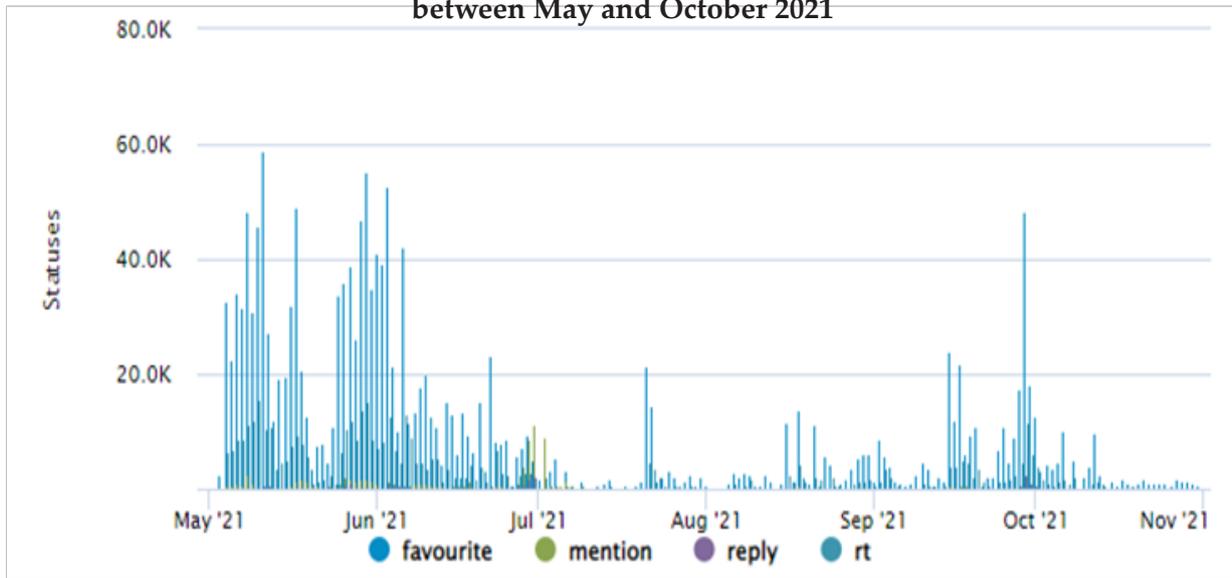
The discussion about the TWK-KPK skyrocketed the next day, Tuesday, 4 May

Figure 1.
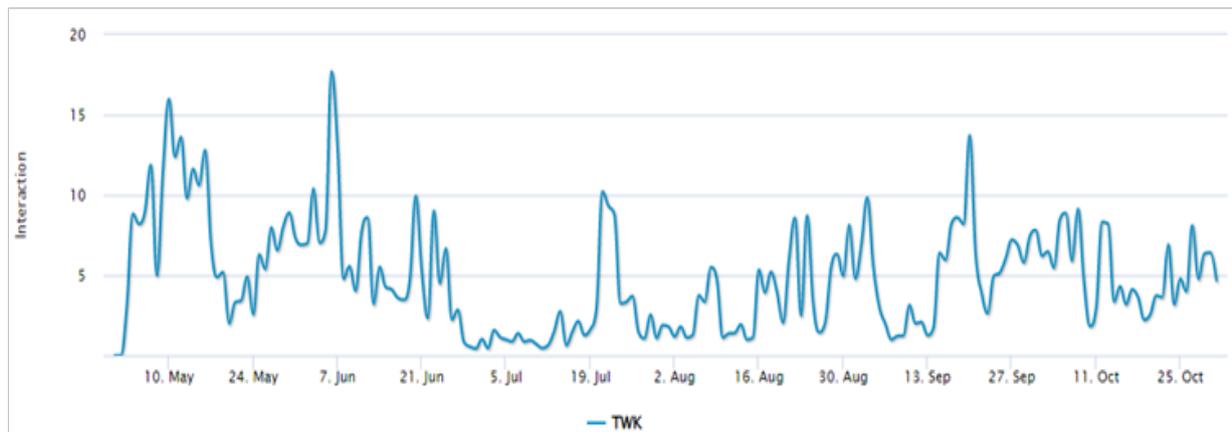**Trends of Total Mentions on Twitter between May and October 2021**

Source: Research Result, 2021

Figure 2.
Total Daily Retweets, Replies, Mentions, and Likes on Twitter
between May and October 2021

Source: Research Result, 2021

Figure 3.
Engagement Rates on Twitter from May to October 2021

Source: Research Result, 2021

2021, with 7,695 mentions. This conversation continued until Sunday, 30 May 2021, with 18,832 mentions. In May 2021, the total conversation reached 267,865 tweets.

Figure 2 shows that the total retweets, replies, mentions, and favorites (likes) fluctuated with an interaction level of 4.44. The highest number of retweets, replies, mentions, and favorites (likes) occurred in May, June, and October 2021. The form of engagement from users was in the form of likes, at 71.94%

or 1,772,582, followed by retweets at 20.24% or 498,624, mentions at 5.16% or 127,019, and replies at 2.66% or 65,607.

We identified the impactful accounts and top influencers in this issue. The former was identified from the engagements, number of posts, and number of followers, and the latter was from the total retweets.

The top ten impactful users are accounts from media institutions or journalists such as @detikcom, @kompascom, @tvOneNews, @

KompasTV, @tempodotco, @liputan6dotcom, @VIVAcoid, @CNNIndonesia, @republikaonline, and @tribunnews. The most impactful was @detikcom, with a total impact of 7,236,016,698, calculated from the number of followers @detikcom (17,146,959) multiplied by the number of engagements (422).

The top ten influencers were more diverse, consisting of anti-corruption activists, employees of the KPK who did not pass the test, media agencies, and political accounts. The accounts are as follows @febridiansyah, @nazaqistsha, @tempodotco, @tatkhoiriyah, @girisuprapdiono, @korantempo, @OsisiCerdas, @PutraWadapi, @CNNIndonesia, and @geloraco. The anti-corruption activist account, @febridiansyah, received the most engagements at 46,208 (table 1).

Researchers found that top influencers are also impactful users, namely the media institutions @tempodotco with 481 mentions with 919,805,718 impressions, and @CNNIndonesia.

Table 1.
List of Actors Leading Discussions on TWK-KPK on Twitter

News Mass Media	Individual
@tempodotco	@febridiansyah
@korantempo	@nazaqistsha
@CNNIndonesia	@tatakhoiriyah
@geloraco	@girisuprapdiono
@detikcom	@OposisiCerdas
@democrazymedia	@PutraWadapi
@republikaonline	@Syarman59
@temponewsroom	@maspiyuaja
@kumparan	@Rizmaya__
@TirtoID	@inaleaks

Source: Research Result, 2021

Figure 4.
The Average Number of Sentiments per Month from May to October 2021
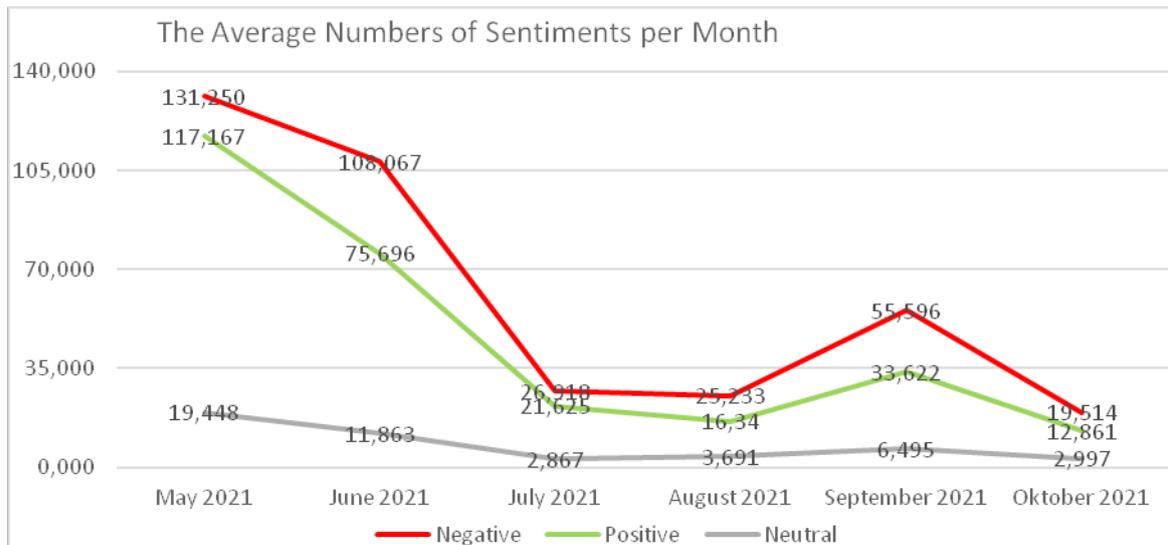
Source: Research Result, 2021

Table 2.
The Average Tractions of Sentiments per Month

No	Period	Negative	Percentage	Positive	Percentage	Neutral	Percentage	Total
1	May 2021	131,250	49.00 %	117,167	43.74 %	19,448	7.26 %	267,865
2	June 2021	108,067	55.24 %	75,696	38.69 %	11,863	6.06 %	195,626
3	July 2021	26,918	52.36 %	21,625	42.06 %	2,867	5.58 %	51,410
4	August 2021	25,233	55.75 %	16,34	36.10 %	3,691	8.15 %	45,264
5	September 2021	55,596	58.09 %	33,622	35.13 %	6,495	6.79 %	95,713
6	October 2021	19,514	55.17 %	12,861	36.36 %	2,997	8.47 %	35,372
	Total	366,578	53.03 %	277,311	40.12 %	47,361	6.85 %	691,250

Source: Research Result, 2021

We captured the trends of users' opinions on TWK KPK to understand the aggregate public sentiments. From May to October 2021, the three sentiments, namely positive, negative, and neutral, fluctuated. The results show that out of 691,250 tweets, 366,578 (53.03%) were negative. Netizens tend to upload, retweet, or like tweets with negative sentiments toward the issue. Positive sentiments received 277.311 tweets (40.12%), and neutral sentiments 47,361 tweets (6.85%) (see the figure 4).

Figure 5.
Sentiment Analysis of the TWK-KPK on Twitter
between May and October 2021
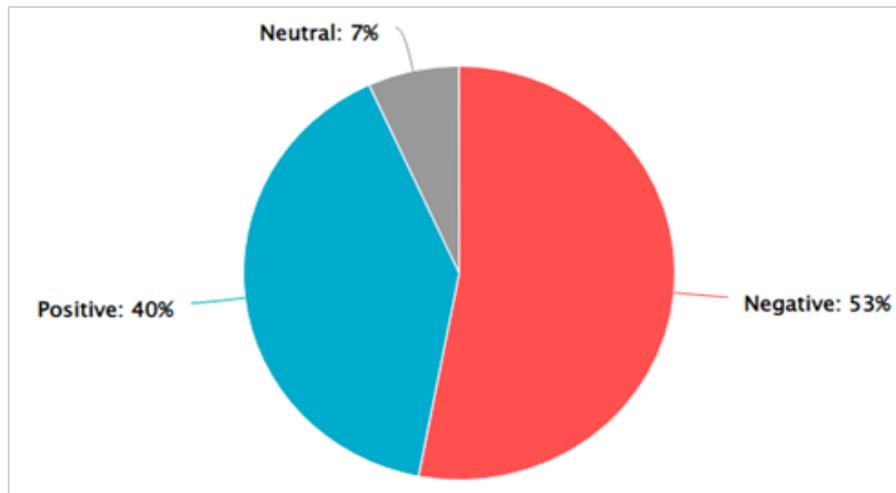
Source: Research Result, 2021

Discussion

The rapid flow of information significantly impacts governance and community participation. The government and the community can interact more closely via digital technology. With more open governance and improved democracy, the formulation of policies could also improve (Zahra et al., 2020).

Previous studies have found that Twitter is a platform for exploring public opinion (Michael & Agur, 2018). Social media has become a new forum for Indonesians to voice their aspirations and protests to the government (Zahra et al., 2021). Protests are an important part of democracy because they allow citizens to express their demands and dissatisfaction with the government. As citizens become more aware of their rights, there has been an increase in protests worldwide for various purposes. This is also supported by social media and technological advancement to exchange information and ideas (Neogi et al., 2021). As a result, democracy's function is now more robust. The community is empowered because issues can be raised to a national level. They can be involved in policymaking and policy monitoring (Zahra et al., 2021), becoming patrons of political and governmental practices.

The TWK-KPK polemic has attracted public attention and has become a trending topic on Twitter between May and October 2021. We analyzed the tweets from May 2021 to October 2021, comparing the average number of retweets and interactions in that period. Thus, we could discover the tractions of public attention regarding the issue in question and the response time. The conversations and engagements from netizens show that public attention to TWK-KPK increased a few days after a media report was published. From May

Table 3.
Most Retweeted Negative Sentiment Tweets between May and October 2021

Tweet	RTs
Ada yg bilang begini, udahlah ga usah pikirkan #75PegawaiKPK itu, mari kita dukung pemerintah tangani pandemi Covid-19.	4,022
Woii.. tau ga, ada dana penanganan pandemi ini dikorupsi. korupsi Bansos Covid-19 itu dibongkar pegawai yg kini justru disingkirkan dg TWK.	
Berpikirlah…	
Walaupun Pak Presiden sdh arahkan, oknum Pimp KPK tetap ngotot utk singkirkan pegawai KPK dgn justifikasi TWK. Ini sdh diduga, dan makin tampak by design.	2,866
Ini tahap akhir pelemahan KPK, maka harapan masy hrs diperjuangkan hingga tahap akhir yg bisa lakukan.	
OTT kpk sejak revisi UU KPK dan Kepemimpinan KPK dibawah Firli Bahuri..merah memudar. Semua anggota tim OTT 2020-2021 justru terjaring tes TWK untuk diberhentikan. Clear kan?	2,637
Siang ini dijapri oleh atasan saya. Meski sudah diduga, baca ini rasanya nyesek banget. Semacam patah hati sama KPK. Selama ini bertanya-tanya, apa yg salah dg wawancara TWK? Kenapa kami statusnya TMS? Tiba-tiba tanpa penjelasan kami dilabeli merah dan sekarang diberhentikan.	2,531
Ketua KPK Firli Bahuri diduga sudah membuat daftar nama pegawai yang akan didepak sejak November 2020. Ia ditengarai memaksa pemimpin KPK yang lain menyetujui TWK dan menyelundupkan pasal tersebut dalam peraturan KPK. #MajalahTempo	2,415
Novel Baswedan bersama 74 pegawai KPK lainnya yang dinyatakan tidak lolos asesmen TWK sebagai syarat alih status menjadi ASN resmi dinonaktifkan KPK.	2,317
Prihatin, dan sedih adanya org yg berani "main kasus" di KPK Lebih prihatin lagi krn Pak A. Damanik, Rizka, Yudi dan saya yg ungkap kasus ini justru diupayakan utk disingkirkan dgn alat TWK. Harapan memberantas korupsi mau dimatikan?	2,299
Tes Wawasan Kebangsaan (TWK), bukan tes kompetensi atau tes utk seleksi. Dlm UU 19/2019 dan Putusan MK jelaskan peg KPK mjd ASN hanya bersifat peralihan yg tdk boleh merugikan pegawai KPK. Tp digunakan utk singkirkan 75 peg, bbrp sdg tangani kasus besar.	2,228
Salam... Saya GIRI SUPRAPDIONO, salah satu dari #75PegawaiKPK yg dinon-jobkan krn dipandang tdk lulus tes wawasan kebangsaan. 16 tahun di KPK, 9 tahun menjadi direktur KPK	2,109
Satu-persatu terungkap, Penyidik yg berhasil membongkar praktek mafia hukum atau jual beli perkara di KPK juga disingkirkan melalui Tes Wawasan Kebangsaan. Pdhal di kasus Suap Tanjung Balai ini muncul nama salah1 Pimpinan KPK yg diduga berkomunikasi dg Walikota.	2,050

Source: Research Result, 2021

to October 2021, the most active discussion was in May, June, and September 2021. The highest was in May 2021, with a total of 267,865 tweets. The discussion declined in July, August, and October 2021, with the lowest in October 2021, declining to 35,372 tweets.

Previous research has found that media and political accounts are important political actors in discussions on Twitter (Russell, Hendricks, Choi, & Stephens, 2015), which is often called a digital platform for political branding (Enli & Skogerbø, 2013; Isa & Himelboim, 2018; Larrondo, Morales I Gras, & Terradillos, 2019; Ottovordemgentschenfelde, 2017; Recuero, Zago, & Soares, 2019; Stier & Steiger, 2018; Sumartias, Romli, Prastowo, & Sjuchro, 2020; Tumasjan, Sprenger, Sandner, & Welpe, 2010).

Previous studies also show that tweets from political figures who respond to an issue are likely to garner user engagement. Political figures generate the largest average number of tweets because they are well-known. This is different from mass media accounts whose contents are news titles, news summaries, and backlinks from the news uploaded by journalists on the news portal (Agur & Gan, 2021; Khairiza & Kusumasari, 2020; Michael & Agur, 2018; Recuero et al., 2019; Ruiz-Soler, Curini, & Ceron, 2019).

From May to October 2021, public sentiment regarding the TWK-KPK issue was negative. This finding is in accordance with previous studies, suggesting that when someone does not like something or wants to complain, especially regarding a debatable

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DAN ILMU POLITIK

Table 4.
Most Retweeted Tweets with Positive Sentiment
Period May 2021 – October 2021

Tweet	RTs
Di tes wawasan kebangsaan seharusnya ada pertanyaan yang sangat praktikal di kehidupan sehari-hari dalam berbangsa dan bernegara. Contohnya berapa uang yg harus dikasih ke petugas pelayan publik yg bilang "biaya seikhlasnya ya" saat mengurus suatu dokumen yang seharusnya gratis	2,729
Ini petikan SK pemberhentian kami. Cek pertimbang poin b. Artinya, Pimpinan KPK melakukan stigmatisasi dg memberika… https://t.co/gf41TzulzD	2,665
Pegawai 75 Menang! Saran perbaikan Ombudsman RI: 1. Presiden mengambil alih kewenangan alih status 75 pegawai 2. Presiden membina ketua KPK, Menteri PANRB & kumham, Ketua LAN 3. BKN membuat roadmap perbaikan 4. Tes TWK distandarisasi Terima kasih Ombudsman RI Hebat, Imparsial! https://t.co/frIMl37kq4	2,407
Jadi gini.. OTT kasus besar yg msh selamatkan muka KPK pasca Revisi UU & Pimpinan baru trnyata ditangani Penyelidik/Penyidik yg justru terancam disingkirkan gara2 tes wawasan kebangsaan yg kontroversial. Misal: OTT KPU, Bansos Covid19, Benur KKP, Cimahi, Gub Sulsel, Nganjuk dll	2,389
Jaringan IndonesiaLeaks mendapat cerita bagaimana Firli Bahuri ngotot menggelar tes wawasan kebangsaan. Berdalih banyak taliban di KPK.	1,974
Namanya, Sujanarko, Direktur PJKAKI KPK. Mengabdi di KPK sejak 2004. Thn 2015, Presiden @jokowi memberikan penghargaan Satyalancana Wira Karya sbg tanda kehormatan krn dharma bakti yg besar pd nusa & bangsa. Skrg namanya masuk list 75 yg tak lolos tes wawasan kebangsaan KPK. https://t.co/T3M5oLksJy	1,961
Begitu mengetahui ini, saya benar2 ga tau harus bcara apa.. Wawasan Kebangsaan apa yg ingin dilihat dr pertanyaan ke pegawai perempuan "apakah bersedia lepas jilbab?" Smg segera ada klarifikasi resmi KPK, Kemenpan & BKN ttg Tes Wawasan Kebangsaan ini. https://t.co/3V0GL9UJ9X	1,901
Hasil assesment TWK sdh diminta oleh beberapa pegawai KPK tp tdk diberikan, malah membuat stigma seolah tdk bisa dibina. Hal ini makin menampakkan adanya niat yg tdk baik. Kalo tesnya jujur, kenapa hasil TWK harus disembunyikan? #BeraniJujurPecat #SaveKPK https://t.co/mp3gvqTxvM	1,718
SIARAN PERS Polemik Tes Wawasan Kebangsaan 74 Guru Besar Antikorupsi Meminta Keputusan Pemberhentian 75 Pegawai KPK Dibatalkan *bacalah https://t.co/DtYElvIhL2	1,710
Kemarin sekitar 19 org kawan2 dari 57 yg disingkirkan dari KPK dgn alat TWK, HP nya diserang/diretas. Semakin jelas pihak2 yg terlibat untuk agenda jahat ini. #panjangumurperjuangan #BeraniJujurPecat https://t.co/ExgRya2jG7	1,564

Source: Research Result, 2021

political topic, people generally express their opinions easily and freely on social media (Pew Research Center, n.d.). As a form of protest over the TWK-KPK issue, Twitter users participated in digital activism, which was reflected in various hashtags from May 2021 to October 2021. The top hashtags aimed to support the dismissed KPK employees, including #75PegawaiKPK (13,272 tweets), #beranijujurpecat (8,623 tweets), #SaveKPK (6,262 tweets), #panjangumurperjuangan (2,580 tweets), and #KPKEndGame (1,914 tweets).

However, the results show that there were tweets with hashtags that imply a clear position to support the KPK's decision to dismiss the 'failing' employees, including #MAsahkanTWKdiKPK (12,254 tweets),

#TWKsahKPKBersih (11,825 tweets), #ASNdiKPKwajibTWK (10,656), and #TWKbersihkanKPK (4,196 tweets). In fact, #MAsahkanTWKdiKPK became the fourth most used hashtag from May 2021 to October 2021. This hashtag was created to argue that the TWK-KPK was in accordance with the procedure and to support KPK to continue working professionally. In other words, this hashtag was a counter to those who were in opposition to TWK-KPK. This form of support could be a direction for further studies.

Figure 6 shows how the network is clustered into two, with dense nodes in the centers and the remaining scattered along the peripheries. The figure also shows that the connection is within the cluster. In other words, the conversation

Figure 5.
Top Hashtags related to TWK-KPK on Twitter between May and October 2021

May 2021

June 2021

July 2021

August 2021

September 2021

October 2021

Source: Research Result, 2021

happened between a supporter and another supporter, and between a critic and another critic. The cross-section is rare. Therefore, an echo chamber emerged (Karlsen, Steen-Johnsen, Wollebæk, & Enjolras, 2017; Sunstein, 2001). Echo chambers and influencers are often deemed responsible for the polarization of users in online social networks and the success of propaganda and disinformation campaigns (Guarino et al., 2020).

Two closely connected modules create echo chambers because people in this group tend to reinforce their views because of their homogeneity (Recuero et al., 2019; Soares & Joia, 2015). The result also shows that polarization is present in the network regarding

Figure 6.
Network of Sentiments toward
the TWK-KPK issue
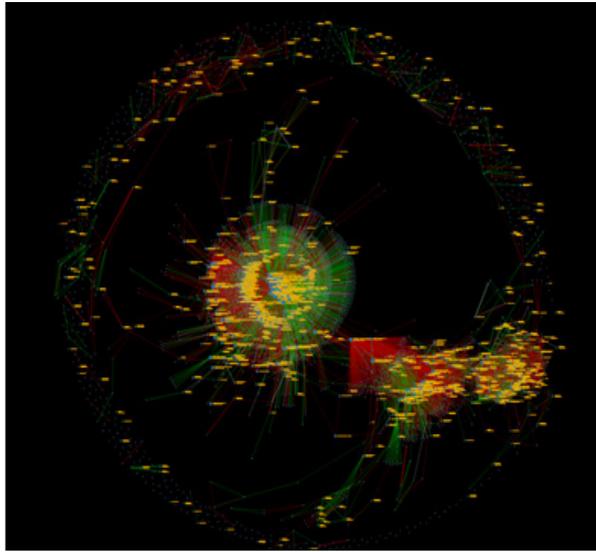
Source: Research Result, 2021

Figure 7.
Network Graph of the Public's Responses
toward TWK-KPK on Twitter
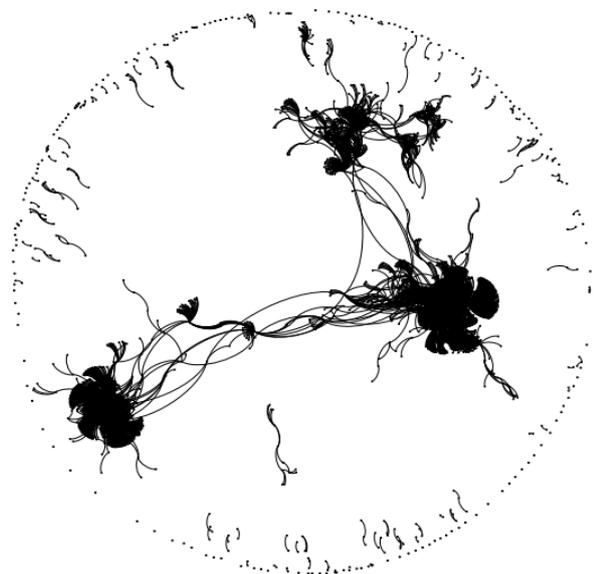
Source: Research Result, 2021

the TWK-KPK. The trend peaked in May and June 2021, then decreased in July and August 2021, but increased again when the decision day was approaching on 30 September 2021.

The hashtags reflect the community's efforts to protest KPK regarding the test's irregularities. These hashtags have attracted much attention from netizens to participate in this digital activism.

The study results show that various actors influence the TWK-KPK issue in the digital sphere. Betweenness centrality in social networks refers to social media users' influence over other social media accounts (Insani & Waryanto, 2012). The bigger the value of betweenness centrality, the greater an account's importance in a social network. It can be seen in Figure 6 *@febriansyah* has a big node and many chains. It means that this account has the greatest impact among other accounts in the social network. Besides, *@febriansyah* account has a significant influence with the highest value compared to other Twitter accounts in this network graph.

In the digital activism process with campaigns through hashtags, both pros and cons sides help raise awareness of the issue in question so that a consensus can be achieved as part of the public policy process (Unsicker, 2013). Each actor plays a role in the campaign for the policy advocacy process to take place (Sabatier & Weible, 2019), namely raising awareness, disseminating news, and expressing opinions on the issues.

The role of media accounts is big in digital advocacy on Twitter. The results show that media accounts have large numbers of followers and high engagement, which means high impact. Media accounts are a source of information for the public to get the latest news (Cook, 2010). The results of this study show that the media accounts are classified as impactful users in amplifying the issue of TWK-KPK on Twitter. The public first noticed this issue from the CNN Indonesia journalists' reports. Tempo is also an impactful user and is one of the top influencers in this issue. These media accounts provide credible and quality information from various perspectives on the TWK-KPK issue.

The media is considered a trusted source for the public (Cook, 2010). In the case of TWK-KPK,

the media had an important role in amplifying the issue by spreading the news to the public. As influential actors, media accounts strategically publish the news written by their journalists. Twitter users will also be directed to read the news through the link provided. Since the media accounts have an extensive network, followers, and audience, information can be disseminated quickly. Thus, the media accounts act as digital advocacy agents and news disseminators.

The involvement of individuals can be seen in the tweets regarding the TWK-KPK issue. Twitter has become a platform to express aspirations and opinions on trending topics (Hänska & Bauchowitz, 2018). The results show that some individual accounts are top influencers, such as *@febriansyah*, the former KPK spokesperson, and *@nazaqistsha*, *@tatakhoiriyah*, and *@girisuprapdiono*, KPK employees who did not pass the test. Individual accounts also discuss political issues, such as *@OpposisiCerdas*, *@maspiyuaja*, and *@inaleaks*.

The role of most actors in the individual category in the TWK-KPK discussion is to express opinions on the advocacy. Conceptually, the indicator of actor involvement in a policy advocacy process is a public expression (Sabatier & Weible, 2019). This can be seen from the tweets of these individual actors questioning the transparency and clarity of TWK-KPK. These individual actors can also be said to be influencers and anti-corruption activists. They help to raise the echo chamber by tweeting or re-tweeting opinion leaders and spreading information to their followers.

The followers of these individual actors contribute to the clustering of the conversation about TWK-KPK into certain positions. Followers of these individual actors are not random followers but they uphold similar views to these individual actors. This phenomenon is called filter bubbles without being influenced by the algorithm (Pariser, 2011). These followers believe in the same opinions that these individual actors voice.

The roles of an algorithm in shaping the democratic potential of digital technologies are debatable. Algorithms create users' online experiences, shaping their search results. Algorithms are critical in helping us make sense of our digital lives. However, they may also be harmful as they compound the bad actions to become the worst by entrenching prejudices, feeding negative emotions, and radicalizing views. Algorithms urge users to consume information passively, not allowing them to actively manage environments or give information the users need. As a result, algorithms in their current form limit the possibilities for democratic politics (Forestal, 2022).

These individual actors identified as top influencers did not have as many followers as impactful users. However, the impact of these top influencers was high in the conversation because they were involved in the conversation, often referred to as super-participants (Graham & Wright, 2014).

Figure 6 shows the clear cut between the actors against and supported TWK-KPK. The two clusters were not shaped by Twitter's algorithm but by the decision of each account on Twitter. Today, users tend to follow who they want to believe. Twitter has made it easier for users to consume only what they want and designed the platform to be a convenient social media, such as by allowing users to follow and mute certain words. In other words, Twitter users filter the information users consume on social media.

In the context of politics, the political environment tends to be homogeneous (Brundidge, 2010; Larrondo et al., 2019; Wojcieszak & Mutz, 2009). More specifically, in this study, when users filter the TWK-KPK issues, the information disseminated by activists against the test results can create a more homogeneous group (opponent group). The homogeneity here ultimately results in an echo chamber, which means that activists cannot be a bridge between pro and con groups.

Based on the results, the cluster of negative sentiments towards the TWK-KPK issues results from the mobilization of impactful users, i.e., media accounts and top influencers, namely individual anti-corruption activists. Impactful users and top influencers are legit when they have many followers and are dependable. The top influencer accounts that were also impactful are *@tempodotco* and *@CNNIndonesia*. This means that solid relationships and networking with online news accounts allow information to spread quickly to give people a new perspective on a given issue.

Conclusion

This study was motivated by the emergence of TWK-KPK issues as a trending topic on Twitter. Several hashtags related to this issue accompanied heated debates on Twitter about the dismissal of 75 KPK employees unsuccessful in TWK-KPK. These hashtags, such as #75PegawaiKPK, #beranijujurpecat, #SaveKPK, #panjangumurperjuangan, and #KPEndGame are symbols of digital democracy practiced by the Indonesian people in the digital public sphere

The participation of netizens in the TWK-KPK conversation can be considered a form of digital activism and an anti-corruption movement in the digital sphere. The citizens have begun to realize and support the anti-corruption movement. They criticize KPK's policies as the institution is expected to be the champion in anti-corruption values and actions.

The results show that negative sentiment dominates the conversation about the TWK-KPK issues, containing a counter-narrative criticizing KPK. The conversations using the hashtags increased daily since this issue surfaced in May and June 2021, declining in July and August 2021, which was also dominated by bot accounts. In September 2021, the decision to dismiss the employees unsuccessful in the TWK-KPK was announced. The issue resurfaced. In October 2021, after the employees were officially dismissed, Twitter users were still talking about it with empathetic sentiments for the dismissed employee.

This study shows the key actors' roles in the network, the message distribution, and the communication network patterns. The network structure is dynamic, as shown through the changes in key actors, the foci of messages exchanged, and network communication patterns. The messages in the network varied in how they were delivered, but they substantially fit the context and had the same tone, protesting the decision to dismiss the 75 KPK employees. The users' concerns could also be observed from the number of clicks and the hashtag #beranijujurpecat, which consistently rejects the TWK-KPK results and consequences.

Future research will benefit from observing other digital activism as a form of democracy practice in the digital sphere. To date, studies on democracy practices in Indonesia, especially on activism to criticize public policy, are mostly field research. The protests on social media have not been taken seriously and are considered an integral part of the democratic practice. This study shows that data from social media such as Twitter opens new avenues for democracy practices in Indonesia. However, it should be noted that Twitter data do not represent the Indonesian population because digital literacy levels vary among the population, and the internet infrastructure has not been evenly distributed. Twitter data likely represent the urban population with specific socio-demographic profiles.

Future research is needed to provide a complete picture of digital political activities in Indonesia, which could also be extended offline. Activism as a form of democracy should be common practice not only on social media but also in everyday life. Social network analysis and big data research in communication studies and other social sciences should be used and developed more to study other social phenomena.

Lastly, democracy in the digital public sphere should be integrated into movements

that strengthen democracy and the public sphere in general. Communications practitioners should create conducive circumstances for digital communication and good practices in digital society.

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